

IN THE CLAIMS

Please cancel Claims 5, 6, 8, 10-12, 14, 15, 21, 22, 24, 26-28, 30-33, 35-57 and 59, without prejudice or disclaimer of subject matter, amend Claims 1, 17, 29 and 60, and add Claims 61-65. The following is a complete listing of claims and replaces all prior versions and listings of claims in the present application:

Claim 1 (currently amended): ~~Communication~~ A communication method of communicating digital information of different data formats ~~via a plurality of communication channels shared~~ through a bridge unit located between ~~several~~ at least two communication units able to communicate by at least one of the data formats, wherein the method comprises:

- a reception operation of receiving digital information having a first format, transmitted via a first communication channel from a communication unit that uses the first format;

- a determination operation of determining at least a need to reformat received digital information having the first format according to ~~at least one characteristic of the plurality of resources available on a second~~ communication channels for communicating between the several communication units channel;

- a determination operation for determining a bandwidth allocation on the second communication channel in order to provide a minimum service of reformatting the received digital information;

- a reformat operation of reformatting the received digital information having the first format to digital information having a second format different from the first format and

selected among a plurality of second formats, if a need is determined and if the allocation of the bandwidth is determined; and

- a transmission operation of transmitting the digital information having the second format via ~~[[a]]~~ the second channel, ~~wherein the digital information having the second format and transmitted via the second channel is received by a communication unit that uses the second format.~~

Claims 2-12 (canceled)

Claim 13 (currently amended): ~~Communication~~ A communication method according to Claim 1, ~~characterised in that~~ wherein

if the digital information having the first format is transmitted in an isochronous mode, the digital information having the second format is transmitted in an asynchronous mode, and

if the digital information having the first format is transmitted in the asynchronous mode, the digital information having the second formation is transmitted in the isochronous mode.

Claims 14-16 (canceled).

Claim 17 (currently amended): ~~Device~~ A bridge for communicating digital information of different data formats ~~via a plurality of communication channels~~ between at least

~~two several~~ communication units able to communicate by at least one of the data formats,
wherein the ~~device comprises communication unit that~~ bridge:

- includes ~~a receiver~~ receiving means for receiving digital information having a first format transmitted via a first communication channel from a first communication unit that uses the first format,

- ~~including a determination unit~~ includes determination means for determining at least a need to reformat received digital information having the first format according to at least one characteristic of the plurality of resources available on a second communication channels for communicating between the ~~several communication units~~ channel,

- includes determination means for determining a bandwidth allocation on the second communication channel in order to provide a minimum service of reformatting the received digital information,

- includes ~~a reformat unit~~ reformatting means for reformatting the received digital information having the first format to digital information having a second format different from the first format and selected among a plurality of second formats, if a need is determined and if the allocation of the bandwidth is determined, and

- is adapted to perform a transmission operation to transmit the digital information having the second format, via ~~[[a]]~~ the second channel, ~~wherein the digital information having the second format and transmitted via the second channel is received by another communication unit, which uses the second format.~~

Claims 18-28 (canceled)

Claim 29 (currently amended): ~~Communication device~~ A bridge according to Claim 17, ~~characterised in that the device further comprises an interbus~~ wherein the bridge is one that conforms with an IEEE 1394.1 standard.

Claims 30-57 (canceled).

Claim 58 (currently amended): ~~Communication device~~ A communication method according to Claim ~~[[57]]~~ 1, wherein the reformat operation is an encryption operation of encrypting the digital information having the first format in order to form the digital information having the second format.

Claim 59 (canceled).

Claim 60 (currently amended): ~~Communication device~~ A bridge according to Claim ~~[[59]]~~ 17, wherein the reformatting means unit comprises an encryption unit adapted to encrypt the digital information having the first format in order to form the digital information having the second format.

Claim 61 (new): A communication method according to Claim 1, wherein said determination operation for determining a bandwidth allocation comprises:

- a request operation of requesting an allocation of a bandwidth that is necessary for transmitting the digital information having the second format;

- a determination operation for determining whether the requested bandwidth allocation is allocated;

- in a case in which the requested bandwidth allocation is not allocated, a renegotiation operation of renegotiating the bandwidth allocated;

- a request operation of requesting an allocation of a new bandwidth in a case in which the renegotiation is possible.

Claim 62 (new): A communication method according to Claim 61, wherein the renegotiation is not possible in a case of reaching a predetermined number of fruitless attempts for allocating requested bandwidth.

Claim 63 (new): A communication method according to Claim 61, wherein, in a case in which the renegotiation is not possible, the reformat operation is not performed.

Claim 64 (new): A communication method according to Claim 1, wherein the bridge unit conforms with an IEEE 1394.1 standard.

Claim 65 (new): A bridge according to Claim 17, wherein said determination means for determining a bandwidth allocation comprises:

- a request unit that is adapted to request an allocation of a bandwidth that is necessary for transmitting the digital information having the second format,

- a determination unit for determining whether the requested bandwidth allocation is allocated, and

- a renegotiation unit for renegotiating the bandwidth allocated in case the requested bandwidth allocation is not allocated,

and said request unit being also adapted to request an allocation of a new bandwidth in case the renegotiation is not possible.